



**NEVADA
CONNECTIONS
ACADEMY**

Advanced Placement (AP) Course Catalog

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How to Use this Course Catalog:

Are you a High Academic Achiever? Do you have aspirations of getting into a Prestigious College or University? Do you like a challenge? Then AP courses are right for you. Students who enroll in AP Track 1 MUST complete at least ONE AP course and the AP exam that coincides with that course. Advanced Placement (AP) courses help a student prepare for a high achieving college experience with college level courses that can lead to college level credit. AP courses can also lead to a boost in your High School GPA. In this catalog, you will find AP courses sectioned by grade level (this is based on their level of difficulty and the suggested courses that should be completed before taking the AP course). Creating a plan that is right for you that aligns with your goals after high school is important. This can be achieved by creating your Individual Graduation Plan with the help of your counselor.

10th Grade AP Course Offerings

AP Computer Science Principles

This AP Computer Science Principles course develops computational thinking practices that students use to problem solve and to critically analyze innovations in computing. The course is appropriate for students who have completed a high school algebra course. Students learn advanced computer science principles by completing rigorous computer game projects. They plan, design, code, and test software using the scripting language GML in GameMaker Studio. Students gain a deep understanding of the global impact of the Internet through the study of game design, game programming, and the fast growing and diverse global video game industry. This course emphasizes building computer science vocabulary and applying computer science principles and essential knowledge of coding practices. Students engage in a variety of activities where they design, code, iterate, and share playable games in a 2d environment defined through the course Big Ideas and Learning Objectives.

Students should have successfully completed a high school algebra course.

Length: 2 semesters

AP Human Geography

The AP® Human Geography course provides high school students with college-level instruction in using a spatial perspective to study how humans understand and use Earth's surface. The student will become skilled in interpreting maps and geospatial data in order to draw conclusions about what is revealed and hidden. The student will hone analysis skills by learning to recognize, interpret, and assess patterns related to population, migration, folk and popular culture, language and religion, and politics. This course effectively prepares the student for the AP Human Geography exam by providing practice in the skills necessary to apply geographic concepts, interpret data, and synthesize information in both multiple-choice and constructed-response formats.

Length: 2 semesters

AP Spanish Language

AP Spanish Language and Culture students practice perfecting their Spanish speaking, listening, reading, and writing skills. They study vocabulary, grammar, and cultural aspects of the language, and then apply what they learn in extensive written and spoken exercises. The course addresses the broad themes of Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. By the end of the course, students will have an expansive vocabulary, a solid, working knowledge of all verb forms and tenses, strong command of other language structures, and an ability to use language in many different contexts and for varied purposes. The equivalent of a college-level language course, AP Spanish Language prepares students for the AP exam and for further study of Spanish language, culture, or literature.

Students should successfully complete Spanish III prior to enrolling in this course.

Length: 2 semesters

11th Grade AP Course Offerings

AP Biology

In this course, the student will gain a foundation in the Life Sciences by focusing on four major themes: 1) how evolution drives the diversity and unity of life; 2) how life uses free energy to maintain homeostasis; 3) how living systems store, retrieve, transmit, and respond to information; and 4) how biological systems interact with each other. These themes are supported by a broad range of biological sub disciplines including biochemistry, molecular biology, cell biology, genetics, physiology, and ecology. The student will use practical experimentation to develop inquiry and reasoning skills to explore these themes throughout the course. This course effectively prepares the student for success on the AP® Biology exam by promoting the deductive reasoning and experimental interpretation skills emphasized in the AP curriculum.

Students should successfully complete Algebra I, Biology, and Chemistry prior to enrolling in this course.

Length: 2 semesters

AP English Language & Composition

In AP English Language and Composition, students investigate rhetoric and its impact on culture through analysis of notable fiction and nonfiction texts, from pamphlets to speeches to personal essays. The equivalent of an introductory college-level survey class, this course prepares students for the AP exam and for further study in communications, creative writing, journalism, literature, and composition.

Students explore a variety of textual forms, styles, and genres. By examining all texts through a rhetorical lens, students become skilled readers and analytical thinkers. Focusing specifically on language, purpose, and audience gives them a broad view of the effect of text and its cultural role. Students write expository and narrative texts to hone the effectiveness of their own use of language, and they develop varied, informed arguments through research. Throughout the course, students are evaluated with assessments specifically designed to prepare them for the content, form, and depth of the AP Exam.

AP English Language and Composition is recommended for 11th and 12th grade students.

Length: 2 semesters

AP Microeconomics

AP Microeconomics studies the behavior of individuals and businesses as they exchange goods and services in the marketplace. Students will learn why the same product costs different amounts at different stores, in different cities, at different times. They'll also learn to spot patterns in economic behavior and how to use those patterns to explain buyer and seller behavior under various conditions. Microeconomics studies the economic way of thinking, understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. The equivalent of a 100-level college course, AP Microeconomics prepares students for the AP exam and for further study in business, history, and political science.

Length: 1 semester

AP US History

The AP® United States History course provides high school students with college-level instruction in using disciplinary practices and historical reasoning to examine the history of the United States from approximately 1491 to the present. The student will look critically at how the American identity has developed over the course of American history and how it has been informed by the changing nature of American culture and societal structures and norms. Students will recognize and interpret patterns of migration and settlement—both to and within the United States—and how those patterns impacted and were impacted by aspects of regional geography and environment. The student will also consider political and economic patterns and relationships in American history, both within the nation and with the global community at large. Through their study of each of these areas, the student will hone reasoning skills to contextualize patterns and events, identify causation and continuity, and analyze change over time. The course is presented both chronologically with content divided into nine time periods, as well as thematically to reinforce that key themes form connections between different regions and time periods in American history. This course effectively prepares students for the AP United States History exam by providing practice in the skills necessary to analyze primary and secondary sources, construct evidence-based arguments, and draw reasoned conclusions in both multiple-choice and constructed-response formats.

*It is recommended that students successfully complete World History prior to enrolling in this course.
Length: 2 semesters*

12th Grade AP Course Offerings

AP Calculus AB

In this course, the student will complete the first semester of coursework similar to a first-year college-level calculus course. This course covers the framework, mathematical practices, and learning objectives for an AP® Calculus AB course as recommended by the College Board. This course provides experience with the methods and applications of calculus and effectively prepares the student to take the AP Calculus AB exam in the spring. The overarching topics in this course are limits, continuity, derivatives, methods of finding derivatives, and applications of derivatives. The student will interact with lesson content, multimedia presentations, an online textbook, and a graphing utility to meet learning goals throughout the course. Featured learning strategies in this course include direct instruction, regular checks and practices, discussions, portfolios, and a practice assessment for the AP Calculus AB exam.

Students should successfully complete Algebra 1, Geometry, and Algebra 2 as well as Precalculus or Trigonometry/Analytical Geometry prior to enrolling. A TI-83+ or TI-84+ graphing calculator is required for this course.

Length: 2 semesters

AP English Literature & Composition

The AP® English Literature and Composition course provides high school students with college-level instruction in reading, interpreting, and analyzing a range of imaginative texts. The student will become a skilled reader of literature written in various periods, disciplines, and styles. The student will learn about elements of poetry and the novel such as language, style, and tone, as well as

become immersed in a study of drama involving William Shakespeare's *King Lear*. In addition, the student will deepen understanding of language, structure, and style by composing a variety of written texts—both formal and informal—that use literary tools and structures to analyze, argue, and inform. This course effectively prepares the student for the AP English Literature and Composition exam by enabling reading, writing, and comprehension of complex texts, while developing further communication skills on a college level.

This course may be a 12th grade student's English course.

Length: 2 semesters

AP Environmental Science

AP Environmental Science provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course draws upon various disciplines, including geology, biology, environmental studies, environmental science, chemistry, and geography in order to explore a variety of environmental topics. Topics explored include natural systems on Earth; biogeochemical cycles; the nature of matter and energy; the flow of matter and energy through living systems; populations; communities; ecosystems; ecological pyramids; renewable and nonrenewable resources; land use; biodiversity; pollution; conservation; sustainability; and human impacts on the environment. The equivalent of an introductory college-level science course, AP Environmental Science prepares students for the AP exam and for further study in science, health sciences, or engineering.

AP Environmental Science requires the completion of hands-on lab activities and has been approved by the College Board as meeting all requirements for a laboratory science course.

Students should successfully complete two years of high school laboratory science (one year of life science and one year of physical science), and one year of algebra

Length: 2 semesters

AP Macroeconomics

AP Macroeconomics students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. They'll also examine how individuals, institutions, and influences affect people, and how those factors can impact everyone's life through employment rates, government spending, inflation, taxes, and production. The equivalent of a 100-level college-level class, this course prepares students for the AP exam and for further study in business, political science and history.

Length: 1 semester

AP Psychology

AP Psychology provides an overview of current psychological research methods and theories. Students will explore the therapies used by professional counselors and clinical psychologists and examine the reasons for normal human reactions: how people learn and think, the process of human development and human aggression, altruism, intimacy, and self reflection. They will study core psychological concepts, such as the brain and sense functions, and learn to gauge human reactions, gather information, and form meaningful syntheses. Along the way, students will also investigate relevant concepts like study skills and information retention. The equivalent of an introductory

college-level survey course, AP Psychology prepares students for the AP exam and for further studies in psychology or life sciences.

Length: 1 semester

AP Statistics

AP Statistics gives students hands-on experience collecting, analyzing, graphing, and interpreting real-world data. They will learn to effectively design and analyze research studies by reviewing and evaluating real research examples taken from daily life. The next time they hear the results of a poll or study, they will know whether the results are valid. As the art of drawing conclusions from imperfect data and the science of real-world uncertainties, statistics plays an important role in many fields. The equivalent of an introductory college-level course, AP Statistics prepares students for the AP exam and for further study in science, sociology, medicine, engineering, political science, geography, and business.

Students should successfully complete Algebra 2 prior to enrolling. A TI-83+ or TI-84+ graphing calculator is required for this course.

Length: 2 semesters

AP US Government & Politics

The AP® United States Government and Politics course provides high school students with college-level instruction in using disciplinary practices to examine key ideas, institutions, and behaviors in American government. The student will look critically at the fundamental beliefs and philosophies that shaped American government and how those ideas have been interpreted and applied throughout history. The student will develop a deep understanding of the U.S. Constitution and the American political system—both its formal and informal processes and procedures. In addition, the student will examine specific governmental institutions, policies, interactions, and behaviors within the political system. Through study of each of these areas, the student will hone reasoning skills by developing evidence-based arguments, interpreting various types of data, and analyzing key documents, including foundational documents and Supreme Court decisions. This course effectively prepares the student for the AP United States Government and Politics exam by providing practice in the skills necessary to draw reasoned conclusions in both multiple-choice and constructed-response formats.

Students should successfully complete HS level government course prior to enrolling in this course.

Length: 1 semester